Abstract of the Disclosure

Human blastocyst-derived stem cells (hBS) or hBS derived cells, such as, e.g., cells of endothermal, mesodermal, and ectodermal origin, are pluripotent cells with widespread potentials within the areas of, e.g., therapeutic treatment, human developmental biology, and drug discovery processes. The present invention relates to a method for clonal derivation of human blastocyst-derived stem cells (hBS) or hBS derived cells. According to the present invention hBS cell colonies or hBS derived cell colonies are subjected to non-enzymatic treatment for dissociation of the cell colonies to one or more single cells, which are then separately cultivated in a serum based medium and/or serum based conditioned medium to obtain one or more cell clones capable of forming colonies.